Neonatal and Pediatric Sepsis I (Module 1) – Credit Hours: 5.0

Chapter: Congenital Infections
Learning Objectives
1. Given maternal and neonatal factors, design a pharmacologic regimen for the newborn with congenital syphilis or at risk of hepatitis B virus infection.
2. Analyze maternal and neonatal factors to implement an appropriate pharmacotherapeutic regimen for the neonate exposed to HIV.
3. Construct a treatment algorithm for managing congenital cytomegalovirus.
4. Evaluate maternal and neonatal factors to develop a treatment and monitoring plan for the infant born to a mother with possible or proven herpes simplex virus.

Chapter: Fungal Infections
Learning Objectives
1. Analyze the role of current assays in the diagnosis of invasive fungal infections (IFIs) in pediatric patients.
2. Distinguish the pharmacokinetic and pharmacodynamic properties of antifungal agents across pediatric age groups.
3. Determine the need for primary antifungal prophylaxis or preemptive antifungal therapy on the basis of patient risk factors.
4. Design a treatment plan for treating IFIs.

Neonatal and Pediatric Sepsis II (Module 2) – Credit Hours: 5.0

Chapter: Central Line-Associated Bloodstream Infections
Learning Objectives
2. Design a strategy to prevent CLABSI.
3. Distinguish between indications for catheter removal or catheter salvage.
4. Design an antimicrobial treatment regimen for the treatment of CLABSI.
5. Evaluate the role of antibiotic lock therapy in preventing and treating CLABSI.

Chapter: Antimicrobial Resistance
Learning Objectives
1. Distinguish between distinct types of antimicrobial resistance.
2. Design an optimal treatment regimen for a patient with an infection caused by a drug-resistant bacterium.
3. Evaluate whether broader therapy should be considered for a patient on the basis of clinical situation and risk of antibiotic-resistant organism(s).
4. Assess the pharmacist’s role in promoting vaccination and appropriate antimicrobial use to reduce the worldwide issue of antimicrobial resistance.

Clinical and Practice Updates I (Module 3) – Credit Hours: 3.5

Chapter: Recorded Webcast: Promoting Antimicrobial Stewardship in the NICU
Learning Objectives
1. Design an antibiotic stewardship (AS) team that represents all needed AS disciplines and can carry out clinical care for newborns and children using AS principles.
2. Evaluate AS efforts using data available from everyday practice source as well as national standards and definitions.
3. Apply AS principles to common problems in NICU care.
4. Design activities for different types of AS teams.

Chapter: Interactive Case: Neonatal Sepsis
Learning Objectives
1. Distinguish risk factors for and signs and symptoms of early-onset sepsis (EOS) and late-onset sepsis (LOS) in a neonatal patient.
2. Assess the differences in treatment options between EOS and LOS.
3. Justify the addition of cefotaxime or gentamicin to the treatment regimen of a neonatal patient with sepsis and concern for CNS involvement.
4. Design a treatment plan, including appropriate monitoring for safety and efficacy, for a patient with neonatal sepsis.
5. Evaluate the role of immunotherapy in the treatment of neonatal sepsis.

Chapter: Interactive Case: Sepsis in the Patient with Immunocompromise
Learning Objectives
1. Given initial presentation, evaluate for sepsis in the pediatric patient undergoing transplantation.
2. Design and evaluate empiric antimicrobial therapy given risk factors, clinical response, and microbiologic data in the pediatric patient with immunocompromise.
3. Distinguish causative pathogens of infection in pediatric patients with or without immunocompromise.
4. Design antiviral therapy and prophylaxis in the pediatric patient with immunocompromise.